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EXAMINER

ORTIZ CRIADO, JORGE L

ART UNIT PAPER NUMBER

2656

DATE MAILED: 01/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/768,131	Applicant(s) PARK, YONG CHEOL	
	Examiner Jorge L. Ortiz-Criado	Art Unit 2656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 14 is objected to because of the following informalities:

Claims 14 is objected to because the term the first PDL in line 4 of the claim is an acronym, which could mean different things and/or change in meaning overtime, hence it would be desirable to write out the actual words to which the acronym refers. For example, “primary defect lists (PDL)”.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-9 and 11-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi U.S. Patent No. 6,373,800.

Regarding claim 1, Takahashi discloses a method of formatting a recording medium having a recording capacity, comprising the steps of:

receiving a command for formatting the recording medium;

registering defective areas in primary defect lists (PDL) and performing a slipping replacement corresponding to a number of PDL entries (See col. 13, lines 25-36),

determining whether a slipping replacement error occurred in response to the number of PDL entries (see col. 13, lines 38-58):

checking a number of un-slipped PDL entries if a slipping replacement error occurred (see col. 13, lines 38-58) ; and

adjusting the recording capacity of the recording medium based on the number of un-slipped PDL entries (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10).

Regarding claim 2, Takahashi discloses wherein the recording capacity adjusting step comprises excluding a capacity corresponding to the number of un-slipped PDL entries (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10).

Regarding claim 3, Takahashi discloses wherein a recording capacity information written in a specified area of the recording medium is updated to indicate the adjusted capacity, wherein the recording capacity information indicates total logical sector numbers (See col. 7, lines 49-62; col. 13, line 58 to col. 14, line 10).

Regarding claim 4, Takahashi discloses a method of formatting a recording medium having a predetermined recording capacity including a spare area for replacing defect areas, the method comprising the steps of:

registering defective area information in a defect area management list if a command for formatting the recording medium is received (See col. 13, lines 25-36),

replacing the defective areas with corresponding spare areas in response to the number of registered defective areas in the defect area management list during the formatting (see col. 13, lines 38-58);

confirming whether or not an error has occurred due to lack of the spare area in comparison to the defective areas (see col. 13, lines 38-58), and

adjusting the recording capacity of the recording medium based on the number of unreplaced defective areas if it is confirmed that an error occurred (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10).

Regarding claim 5, Takahashi discloses wherein the recording capacity adjusting step comprises excluding a capacity corresponding to the number of unreplaced defective areas (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10).

Regarding claim 6, Takahashi discloses wherein the recording capacity information written in a specified area of the recording medium is updated to indicate the adjusted capacity, wherein the recording capacity information indicates total logical sectors numbers (See col. 7, lines 49-62; col. 13, line 58 to col. 14, line 10).

Regarding claim 7, Takahashi discloses a method of formatting a recording medium having a predetermined recording capacity including a spare area, the method comprising the steps of:

registering defective segment addresses corresponding to defective segments in a defect list in the recording medium if a command for formatting the recording medium is received (See col. 13, lines 25-36),

performing a defect replacement corresponding to the defective segment addresses registered in the defect list during the formatting, defect replacement for replacing defective segments (see col. 13, lines 38-58);

determining if an error occurred during the defect replacement, wherein the error is caused when a size of the defective segments exceeds the spare area (see col. 13, lines 38-58);

stopping the defect replacement if an error occurred and checking un-slipped segments by determining a number of the defective segments not subjected to the defect replacement due to insufficient spare area (see col. 13, lines 38-58); and

excluding a portion from the recording capacity, the portion corresponding to the number of un-slipped segments, thereby managing the un-slipped segments continuously (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10)

Regarding claim 8, Takahashi discloses wherein the first defect list is a primary defect list (PDL) (see col. 13, lines 38-58)

Regarding claim 9, Takahashi discloses wherein the defect replacement comprises a slipping replacement to be performed during the formatting process (see col. 13, lines 38-58)

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Regarding claim 11, Takahashi discloses wherein each defective segment comprises a defective sector (see col. 13, lines 38-58).

Regarding claim 12, Takahashi discloses updating recording capacity information to indicate excluded portion (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10)

Regarding claim 13, Takahashi discloses wherein the recording capacity information is total logical sector numbers (See col. 7, lines 49-62; col. 13, line 58 to col. 14, line 10).

Regarding claim 14, Takahashi discloses a method of formatting a recording medium having a recording capacity, comprising the steps of:

receiving a command for formatting the recording medium (see col. 13, lines 38-58),

performing a slipping replacement corresponding to a number of PDL entries (see col. 13, lines 38-58),

determining whether a slipping replacement error has occurred in response to the number of PDL entries (see col. 13, lines 38-58),

checking a number of un-slipped PDL entries if a slipping replacement error is occurred (see col. 13, lines 38-58) and

excluding a portion from the recording capacity, the portion corresponding to the number of un-slipped PDL entries to replace the un-slipped PDL (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10).

Regarding claim 15, Takahashi discloses updating recording capacity information to indicate to exclude portion (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10).

Regarding claim 16, Takahashi discloses wherein the recording capacity information is total logical sector numbers (See col. 7, lines 49-62; col. 13, line 58 to col. 14, line 10).

Response to Arguments

4. Applicant's arguments filed 11/08/2005 have been fully considered but they are not persuasive.

In regard to claim 1,4,7 and 14 applicant argues that nowhere in Takahashi performing a slipping replacement that corresponds to the number of PDL entries is disclosed, that Takahashi does not disclosed the claimed elements of “adjusting the recording capacity of the recording medium based on the number of un-slipped PDL entries”, and that “excluding a portion from the recording capacity, the portion corresponding to the number of un-slipped segments, thereby managing the un-slipped segments continuously and “excluding a portion from the recording capacity, the portion corresponding to the number of un-slipped PDL entries to replace the un-slipped PDL entries.

The examiner cannot concur with the applicant because Takahashi clearly discloses that a command for **formatting** is received for performing the primary defect list (PDL), which is pointed out by the examiner at col. 13, ll. 31. And the process for the PDL is clearly discloses

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and as described is performed by a slipping replacement, for example at least in col. 7, ll. 29-33, states, “*The slipping replacement process is done for primary defects*”, which a clear and precise explanation of such slipping replacement in the following paragraphs and col. 8, and as shown on Fig. 8.

Furthermore, Takahashi discloses adjusting the recording capacity of the recording medium based on the number of un-slipped PDL entries, in that when confirmed that an error has occurred in the slipping replacement process, which an error is due to insufficient spare areas, Takahashi adjust the recording capacity of the recording medium based on the error caused in the slipping replacement which is performed for the PDL, un-slipped defects, which are un-slipped PDL entries and further adding/reserving/assigning/expanding/creating etc. new spare areas (see the col. 13, line 19 to col. 14, line 2), where Takahashi clearly discloses excluding a portion from the recording capacity, in that that the areas are part of the user area, or in any areas other than the user areas at the time of such addition assignment /expansion/creation of the new spare areas spare areas (see col. 14, lines 11-22), which as a result the capacity of the information recording medium can be fully and effectively utilized. Therefore, the examiner has concluded that Takahashi meet all the limitations as claimed.

5. Applicants states and appears to admit that the “addition and expansion of spare areas is the disadvantage of the prior art, and which the present invention addresses such disadvantage, page 8, lines 7-9 of remarks.

However, such prior art disadvantage is what applicant’s has disclose in the specification as to be the subject matter of applicant’s invention of adjusting the recording capacity of the

recording medium and/or excluding a portion from the recording capacity, by an expansion/addition of such spare areas, which in result of such expansion/addition etc. the recording capacity is reduced, since the recording capacity is used in such expansion/addition, see for example page 9, ll. 4-15 and Fig. 4.

This statement indicates that the invention is different from what is defined in the claim(s), and evidenced that the claims would fail(s) to correspond in scope with that which applicant(s) regard as the invention. This raises the question of whether applicant is failing to set forth the subject matter which applicant(s) regard as their invention. Applicant's cooperation is respectfully requested in this matter.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L. Ortiz-Criado whose telephone number is (571) 272-7624. The examiner can normally be reached on Mon.-Thu.(8:30 am - 6:00 pm),Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Thi Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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